In the Claims:

Please amend the claims as follows:

1. (currently amended) A control system ~~(5)~~ for controlling the movements of a plurality of mechanical units ~~(1, 2, 3)~~, ~~characterized in that~~ the control system ~~further comprises~~ comprising:

a program means comprising a plurality of mechanical unit programs ~~(6, 7, 8)~~, each comprising program instructions including movement instructions for at least one of said mechanical units,

a plurality of path planners ~~(9, 10, 11)~~, each path planner adapted to receive instructions from at least one of said mechanical unit programs and on basis thereof determine how the mechanical unit should move in order to be able to execute the movement instruction, wherein at least one of said path planners is adapted to receive instructions from at least two of said mechanical unit programs and on basis thereof determine how the mechanical units should move in order to synchronize their movements, and

switching means ~~(22)~~ adapted to switch a mechanical unit program from one path planner to another, whereby the movements of the mechanical units are synchronized when their mechanical unit programs are connected to the same path planner and the movements of the mechanical units are independent when their mechanical unit programs are connected to different path planners.

2. (currently amended) ~~A~~ The control system according to claim 1, ~~characterized in that~~

wherein each mechanical unit program is connected to one of said path planners, and said switching means is adapted to upon command disconnect the mechanical unit program from the connected path planner and to connect the mechanical unit program to another path planner.

3. (currently amended) The control ~~Control~~ system according to claim 1 ~~or 2~~, ~~characterized in that the control system (5) comprises~~ further comprising:

a central data storage means ~~(16)~~ and ~~that~~ wherein at least one mechanical unit ~~(1, 2, 3)~~ is arranged to transmit data concerning its position and/or status to the central data storage means ~~(16)~~.

4. (currently amended) The control ~~Control~~ system according to claim 3, ~~characterized in that~~ wherein said at least one mechanical unit ~~(1, 2, 3)~~ is arranged to transmit position and/or status data to the central data storage means ~~(16)~~ when it is stationary i.e. when it has stopped moving.

5. (currently amended) The control ~~Control~~ system according to claim 3 ~~or 4~~, ~~characterized in that~~ said at least one mechanical unit ~~(1, 2, 3)~~ is arranged to transmit position and/or status data to the central data storage means ~~(16)~~ while it is moving to a new location.

6. (currently amended) The control ~~Control~~ system according to claim 4 ~~or 5~~, ~~characterized in that~~ said position data comprises information concerning the displacement and/or rotation of said at least one mechanical unit's ~~(1, 2, 3)~~ coordinate system ~~(4)~~.

7. (currently amended) The control ~~Control~~ system according to ~~any of the preceding claims, characterized in that~~ claim 3, wherein the central data storage means ~~(16)~~ is arranged so that data stored therein is accessible by an operator, a mechanical-unit program ~~(6, 7, 8)~~ or the path planning means ~~(9, 10, 11)~~.

8. (currently amended) The control ~~Control~~ system according to ~~any of the preceding claims, characterized in that~~ claim 3, wherein the central data storage means ~~(16)~~ is arranged so that data stored therein is accessible via a network such as the Internet.

9. (currently amended) A method for controlling the movements of a plurality of mechanical units ~~(1, 2, 3)~~, comprising:

storing a plurality of mechanical unit programs ~~(6, 7, 8)~~, each comprising program instructions including movement instructions for one of said mechanical units,

connecting said mechanical unit programs to a plurality of path planners so that at least two of the mechanical unit programs are connected to different path planners, wherein each of said at least two path planners receives instructions from the connected mechanical unit program and on basis thereof determines how the mechanical unit should move in order to be able to execute the movement instructions of the program, and

switching at least one of the mechanical unit programs to another path planner so that more than one of the mechanical unit programs are connected to the same path planner, which receives instructions from the connected mechanical unit programs and on basis thereof determines how the mechanical units should move in order to synchronize their ~~movements,~~ movements.

10. (currently amended) The method ~~Method~~ according to claim 9, further comprising:

connecting each mechanical unit program to one of said path planners, and

upon command disconnecting at least one of the mechanical unit programs from the connected path planner and to connect the mechanical unit program to another path planner.

11. (currently amended) The method ~~Method~~ according to claim 9 ~~or 10~~, further comprising:

storing position and/or status data from at least one of the plurality of mechanical units ~~(1, 2, 3)~~ in a central data storage means ~~(16)~~.

12. (currently amended) A computer program product, comprising:

a computer readable medium; and

containing computer program code means recorded on the computer readable medium for making a computer or processor execute the steps of ~~the method according to any of claims 9-11~~

storing a plurality of mechanical unit programs, each comprising program instructions including movement instructions for one of said mechanical units,

connecting said mechanical unit programs to a plurality of path planners so that at least two of the mechanical unit programs are connected to different path planners, wherein each of said at least two path planners receives instructions from the connected mechanical unit program and on basis thereof determines how the mechanical unit should move in order to be able to execute the movement instructions of the program, and

switching at least one of the mechanical unit programs to another path planner so that more than one of the mechanical unit programs are connected to the same path planner, which receives instructions from the connected mechanical unit programs and on basis thereof determines how the mechanical units should move in order to synchronize their movements.

13. (cancelled)

14. (currently amended) Use of a control system ~~(5)~~ according to claim 1 ~~any of claims 1-8, a method according to any of the claims 9-11 or a computer program according to claim 12~~ in a system comprising a plurality of mechanical units ~~(1, 2, 3)~~, namely robots and/or external axes, which are programmed to execute at least one task where at least two of said mechanical units move synchronously.

15. (new) Use of a method according to claim 9 in a system comprising a plurality of mechanical units, namely robots and/or external axes, which are programmed to execute at least one task where at least two of said mechanical units move synchronously.

16. (new) Use of a computer program product according to claim 12 in a system comprising a plurality of mechanical units, namely robots and/or external axes, which are programmed to execute at least one task where at least two of said mechanical units move synchronously.